

ABSTRACT

Method, apparatus, and program means for performing misaligned memory load and copy using aligned memory operations together with a SIMD merge instruction. The method of one embodiment comprises determining whether a memory operation involves a misaligned memory address. The memory operation is performed with aligned memory accesses if the memory operation is determined as not involving a misaligned memory address. The memory operation is performed with an algorithm including a merge operation and aligned memory accesses if the memory operation is determined as involving a misaligned memory address.